

WHAT IS CLAIMED IS:

1. A three-dimensional image display device comprising:

an image display portion for displaying image information according to a parallax separately in a first segment and a second segment,

polarization direction converting means opposed to said first and second segments of said image display portion for converting a polarization direction of polarized light of said image information from said first segment into a direction different from a polarization direction of polarized light of said image information from said second segment,

polarization means having a first polarization plate portion and a second polarization plate portion to which said polarized lights separated by said polarization direction converting means are respectively input, and

a position holding mechanism for holding the positional relation between said polarization means and said polarization direction converting means.

2. The three-dimensional image display device according to claim 1, wherein said polarization direction converting means comprises a separate wave plate filter,

said polarized lights separated by said separate wave plate filter being respectively input into said first polarization plate portion and said second polarization plate portion.

3. The three-dimensional image display device according to claim 2, wherein said separate wave plate filter comprises a half-wave plate, said three-dimensional image display device further having a quarter-wave plate interposed between said image display portion and said polarization means.

4. The three-dimensional image display device according to claim 2, wherein said separate wave plate filter comprises a half-wave plate, said three-dimensional image display device further having a half-wave plate provided on one of said first and second polarization plate portions of said polarization means so as to face said image display portion.

5. The three-dimensional image display device according to claim 4, wherein said first and second polarization plate portions are changeable in position, so that said image information displayed on said image display portion can be changed from a three-dimensional image to a two-dimensional image or vice versa.

6. The three-dimensional image display device

according to claim 1, wherein the distance, parallelism, and alignment between said polarization means and said polarization direction converting means are held by said position holding mechanism.

7. The three-dimensional image display device according to claim 1, wherein said position holding mechanism comprises an arm having a first end for supporting said polarization means and a second end fixed to a frame of said image display portion.

8. The three-dimensional image display device according to claim 7, wherein said position holding mechanism further comprises click type position adjusting means provided at said first end of said arm for adjusting the position of said polarization means.

9. The three-dimensional image display device according to claim 7, wherein said position holding mechanism further comprises click type position adjusting means provided at said second end of said arm for adjusting the position of said arm.

10. The three-dimensional image display device according to claim 5 or 7, wherein said position holding mechanism comprises position adjusting means for changing the position of said polarization means or said arm in at least one of a longitudinal direction, a lateral

direction, and a vertical direction.

11. The three-dimensional image display device according to claim 10, wherein said polarization means is rotatable relative to said polarization direction converting means in at least one of said longitudinal direction, said lateral direction, and said vertical direction.

12. The three-dimensional image display device according to claim 7, wherein said arm is extendable and contractable in its longitudinal direction.

13. The three-dimensional image display device according to claim 1, wherein said image display portion is adjustable in angular position.

14. The three-dimensional image display device according to claim 1, wherein the surface of said polarization means is covered with a transparent protective material.

15. A position holding mechanism for holding the positional relation between polarization means and polarization direction converting means,

said polarization means having a first polarization plate portion and a second polarization plate portion to which polarized lights separated by said polarization direction converting means are respectively input.

16. The position holding mechanism according to claim 15, wherein said position holding mechanism is for use with a three-dimensional image display device having an image display portion for displaying image information according to a parallax separately in a first segment and a second segment, said polarization direction converting means opposed to said first and second segments of said image display portion for converting a polarization direction of polarized light of said image information from said first segment into a direction different from a polarization direction of polarized light of said image information from said second segment.

17. The position holding mechanism according to claim 15, wherein said polarization direction converting means comprises a separate wave plate filter, said polarized lights separated by said separate wave plate filter being respectively input into said first polarization plate portion and said second polarization plate portion.

18. The position holding mechanism according to claim 17, wherein said separate wave plate filter comprises a half-wave plate, said three-dimensional image display device further having a quarter-wave plate interposed between said image display portion and said

polarization means.

19. The position holding mechanism according to claim 17, wherein said separate wave plate filter comprises a half-wave plate, said three-dimensional image display device further having a half-wave plate provided on one of said first and second polarization plate portions of said polarization means so as to face said image display portion.

20. The position holding mechanism according to claim 19, wherein said first and second polarization plate portions are changeable in position, so that said image information displayed on said image display portion can be changed from a three-dimensional image to a 2D image or vice versa.

21. The position holding mechanism according to claim 15, wherein the distance, parallelism, and alignment between said polarization means and said polarization direction converting means are held by said position holding mechanism.

22. The position holding mechanism according to claim 15, wherein said position holding mechanism comprises an arm having a first end for supporting said polarization means and a second end fixed to a frame of said image display portion.

23. The position holding mechanism according to claim 22, wherein said position holding mechanism further comprises click type position adjusting means provided at said first end of said arm for adjusting the position of said polarization means.

24. The position holding mechanism according to claim 22, wherein said position holding mechanism further comprises click type position adjusting means provided at said second end of said arm for adjusting the position of said arm.

25. The position holding mechanism according to claim 20 or 22, wherein said position holding mechanism comprises position adjusting means for changing the position of said polarization means or said arm in at least one of a longitudinal direction, a lateral direction, and a vertical direction.

26. The position holding mechanism according to claim 25, wherein said polarization means is rotatable relative to said polarization direction converting means in at least one of said longitudinal direction, said lateral direction, and said vertical direction.

27. The position holding mechanism according to claim 22, wherein said arm is extendable and contractable in its longitudinal direction.

28. The position holding mechanism according to claim 15, wherein said image display portion is adjustable in angular position.

29. The position holding mechanism according to claim 15, wherein the surface of said polarization means is covered with a transparent protective material.

30. Polarization means comprising:

a first polarization plate portion, and

a second polarization plate portion;

said first and second polarization plate portions are input polarized lights separated by polarization direction converting means, respectively,

said polarization means is mounted to a position holding mechanism for holding the positional relation between said polarization means and said polarization direction converting means.

31. The polarization means according to claim 30, wherein said polarization means is for use with a three-dimensional image display device having an image display portion for displaying image information according to a parallax separately in a first segment and a second segment, and said polarization direction converting means opposed to said first and second segments of said image display portion for converting a polarization direction



of polarized light of said image information from said first segment into a direction different from a polarization direction of polarized light of said image information from said second segment.

32. The polarization means according to claim 30, wherein said polarization direction converting means comprises a separate wave plate filter, said polarized lights separated by said separate wave plate filter being respectively input into said first polarization plate portion and said second polarization plate portion.

33. The polarization means according to claim 32, wherein said separate wave plate filter comprises a half-wave plate, said three-dimensional image display device further having a quarter-wave plate interposed between said image display portion and said polarization means.

34. The polarization means according to claim 32, wherein said separate wave plate filter comprises a half-wave plate, said three-dimensional image display device further having a half-wave plate provided on one of said first and second polarization plate portions of said polarization means so as to face said image display portion.

35. The polarization means according to claim 34, wherein said first and second polarization plate portions

are changeable in position, so that said image information displayed on said image display portion can be changed from a three-dimensional image to a 2D image or vice versa.

36. The polarization means according to claim 30, wherein the distance, parallelism, and alignment between said polarization means and said polarization direction converting means are held by said position holding mechanism.

37. The polarization means according to claim 36, wherein said position holding mechanism comprises an arm having a first end for supporting said polarization means and a second end fixed to a frame of said image display portion.

38. The polarization means according to claim 36, wherein said position holding mechanism further comprises click type position adjusting means provided at said first end of said arm for adjusting the position of said polarization means.

39. The polarization means according to claim 37, wherein said position holding mechanism further comprises click type position adjusting means provided at said second end of said arm for adjusting the position of said arm.

40. The polarization means according to claim 35 or 37, wherein said position holding mechanism comprises position adjusting means for changing the position of said polarization means or said arm in at least one of a longitudinal direction, a lateral direction, and a vertical direction.

41. The polarization means according to claim 40, wherein said polarization means is rotatable relative to said polarization direction converting means in at least one of said longitudinal direction, said lateral direction, and said vertical direction.

42. The polarization means according to claim 30, wherein the surface of said polarization means is covered with a transparent protective material.